

IN THE CLAIMS:

1. (ORIGINAL) A portable advisory system for balancing airflows in a paint booth comprising:

a portable airflow sensor to measure airflows in the paint booth; and

a portable computer connected to said airflow sensor for collecting data from said airflow sensor and guiding an operator through a process of adjusting multiple fan speeds and duct dampers to achieve desired airflows.

2. (ORIGINAL) A portable advisory system as set forth in claim 1 wherein said computer includes a database of optimal control settings for storing information of last optimal commands and last optimal sensitivity model.

3. (ORIGINAL) A portable advisory system as set forth in claim 1 wherein said computer includes a database for storing information of air velocities and VFD/damper commands.

4. (ORIGINAL) A portable advisory system as set forth in claim 1 wherein said computer is a laptop computer.

5. (ORIGINAL) A portable advisory system as set forth in claim 1 wherein said computer is a palmtop computer.

6. (ORIGINAL) A portable advisory system as set forth in claim 1 wherein said computer includes a flexible set-up dialog.

7. (ORIGINAL) A portable advisory system as set forth in claim 1 wherein said computer includes an algorithm communicating with a plurality of databases and a flexible set-up dialog.

B/ 8. (ORIGINAL) A method of balancing airflows in a paint booth, said method comprising the steps of:

providing a portable airflow sensor to measure airflows in the paint booth;

providing a portable computer and connecting the portable computer to the air flow sensor;

measuring the velocity of the airflows in the paint booth with the airflow sensor and storing the measured airflows in a database; and

updating a sensitivity model (J) of the paint booth with the measured velocity of the airflows to balance the airflows in the paint booth.

9. (ORIGINAL) A method as set forth in claim 8 including the step of updating on-line the VFD and damper settings.

10. (ORIGINAL) A method as set forth in claim 8 wherein said step of updating includes computing a mean squared error with the sensitivity model (J).

11. (ORIGINAL) A method as set forth in claim 8 including the step of updating new inputs and current sensitivity model in a first database.

12. (ORIGINAL) A method as set forth in claim 8 including the step of calculating a rate of learning.
